**Game Thinking Planning Template**

Lesson Outcomes

WS8: A student applies scientific understanding and critical thinking skills to suggest possible solutions to identified problems.

The boys will work in small groups and complete three different science based problem solving challenges. Their speed and creativity in solving the task will be rewarded with a certain amount of “virtual cash” money. At the end of the day there will be a one final – all-in challenge. Each group gets to buy resources to solve the final problem based on what they have accumulated during the day. They then have a certain amount of time to create a structure that lets a marble drop to the floor slowest.

Description of your audience

This lesson will involve a Year 9 group of around 80 boys. The boys love to **compete** against each other and enjoy food or lollies as a **reward**. They are a very **social** group with strong mateship ties. They are relatively bright and like a **challenge**. I will keep this in mind when designing the gamification of the task.

Time constraints

The group will have around 3 hours total in time but it is spread into 3 x one hour slots during a ‘Science Challenge’ day

Game Elements

GAME DYNAMICS – students get 3 chances to get their best score of points before moving to the next activity (level). They will also work in small groups of their own choosing – so there is a relationship factor as they work in teams

GAME MECHANICS – there will be 4 challenges in total, there will be frequent competitions, rewards of Coke and lollies, they will take turns demonstrating and testing their designs and the virtual money allows them to acquire resources for the final challenge.

GAME COMPONENTS – There are levels/points, a boos fight at the end between teams, awards and ‘virtual’ cash to be won.

Fun check

Easy Fun – one of the challenges involves making the biggest bubble challenge. They are outside, blowing bubbles, getting wet and experimenting.

Hard Fun – Designing a functional paddleboat. They have a basic ‘how to’ tutorial then they have to apply this to designing and building their own paddleboat

Serious Fun – The final challenge is a matching of wits against all teams and a competitive rush to use what they have available to be the best.

Social Fun – they work in teams of their own choosing and interact with various teams along the way.